

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P967342

Luminaire Tested: **NAV-SB4D-830-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967342
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-830-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37994.7 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

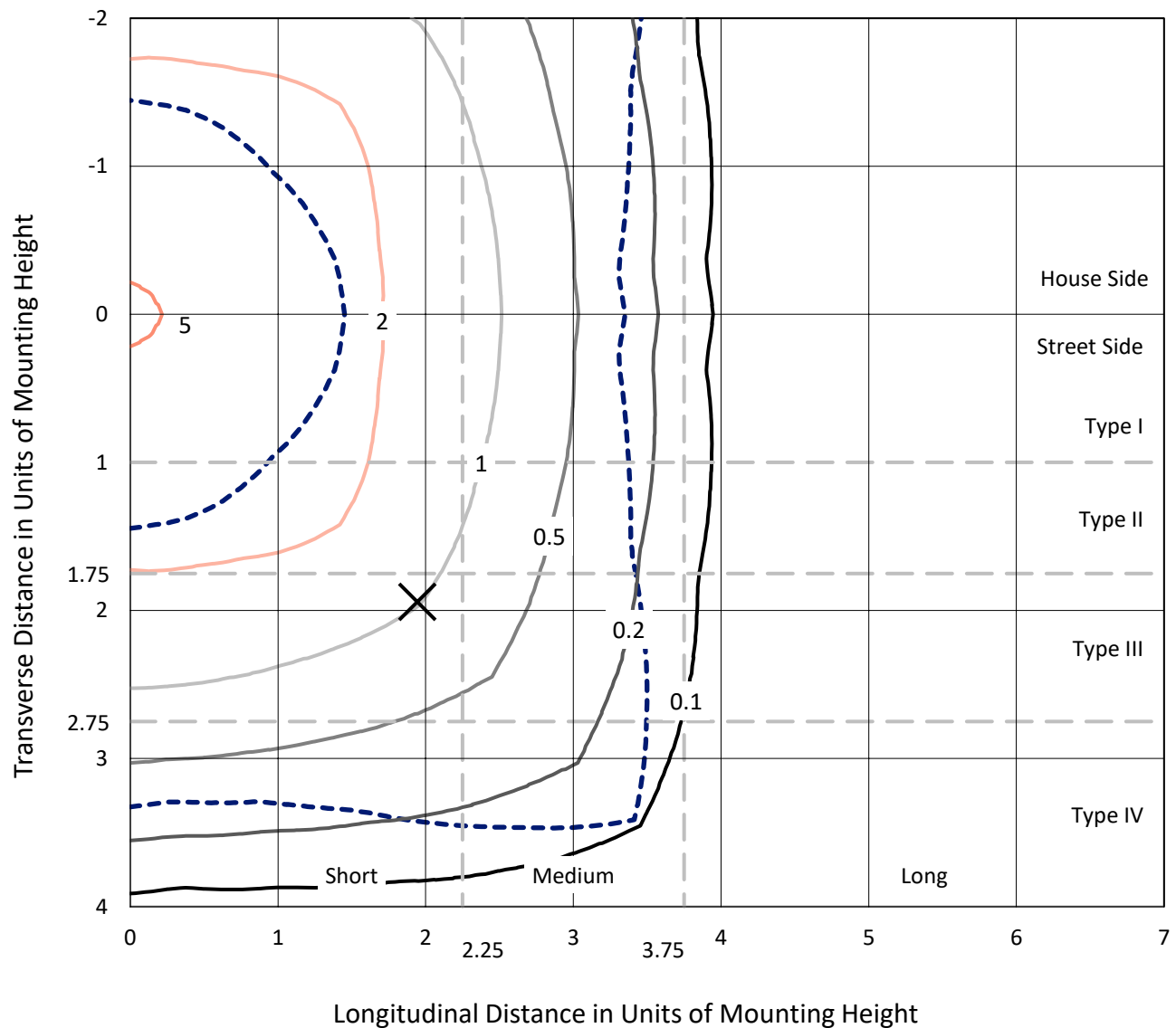


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Iso-Footcandle Lines of Horizontal Illumination

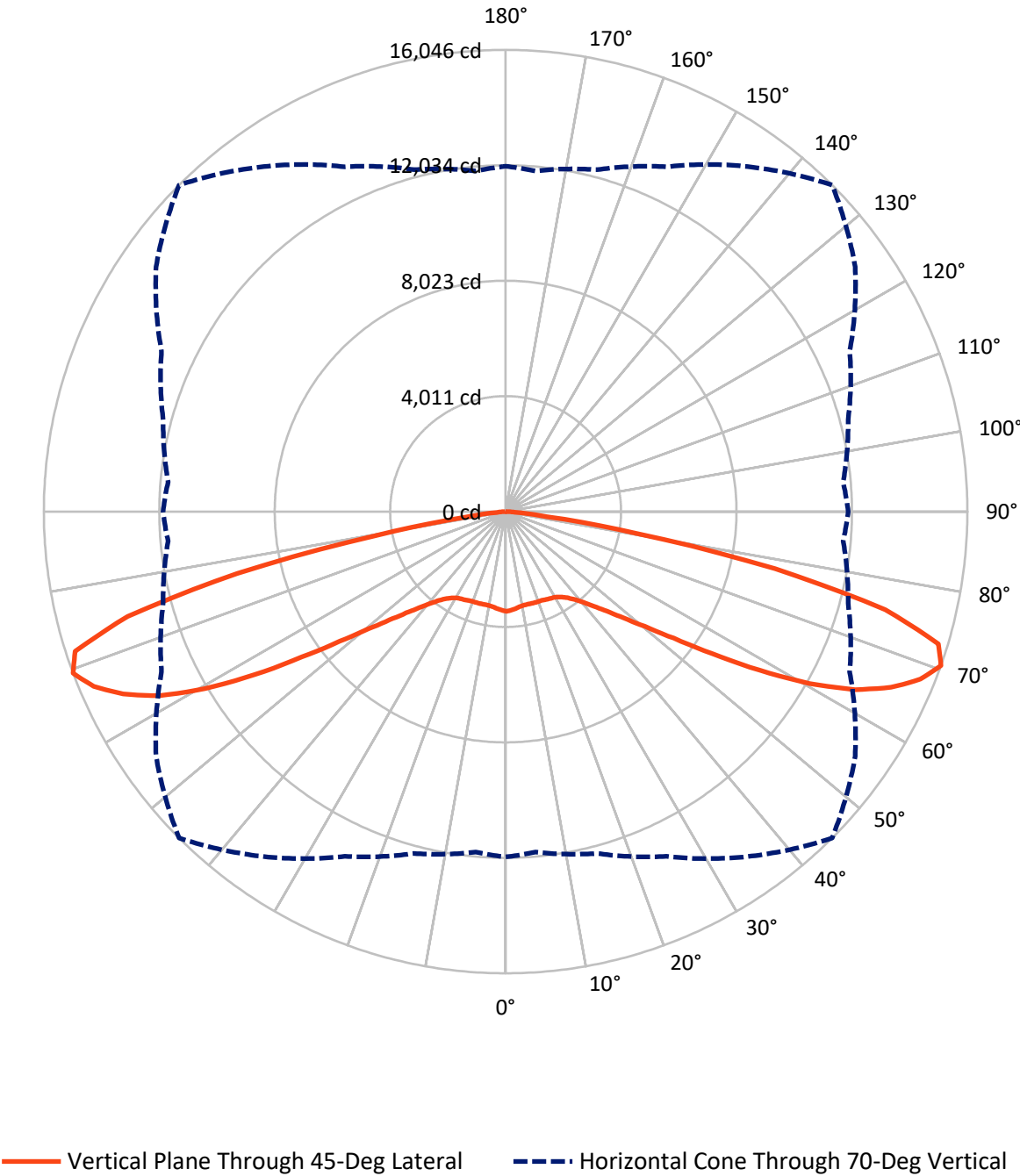
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18997.4	0.0	18997.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18997.4	0.0	18997.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	37994.7	0.0	37994.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.4	0.8
10°-20°	946.7	2.5
20°-30°	1575.4	4.1
30°-40°	2382.5	6.3
40°-50°	3959.1	10.4
50°-60°	7470.7	19.7
60°-70°	12614.6	33.2
70°-80°	8289.1	21.8
80°-90°	434.3	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	37994.7	100.0
0°-180°	37994.7	100.0

Coefficient of Utilization



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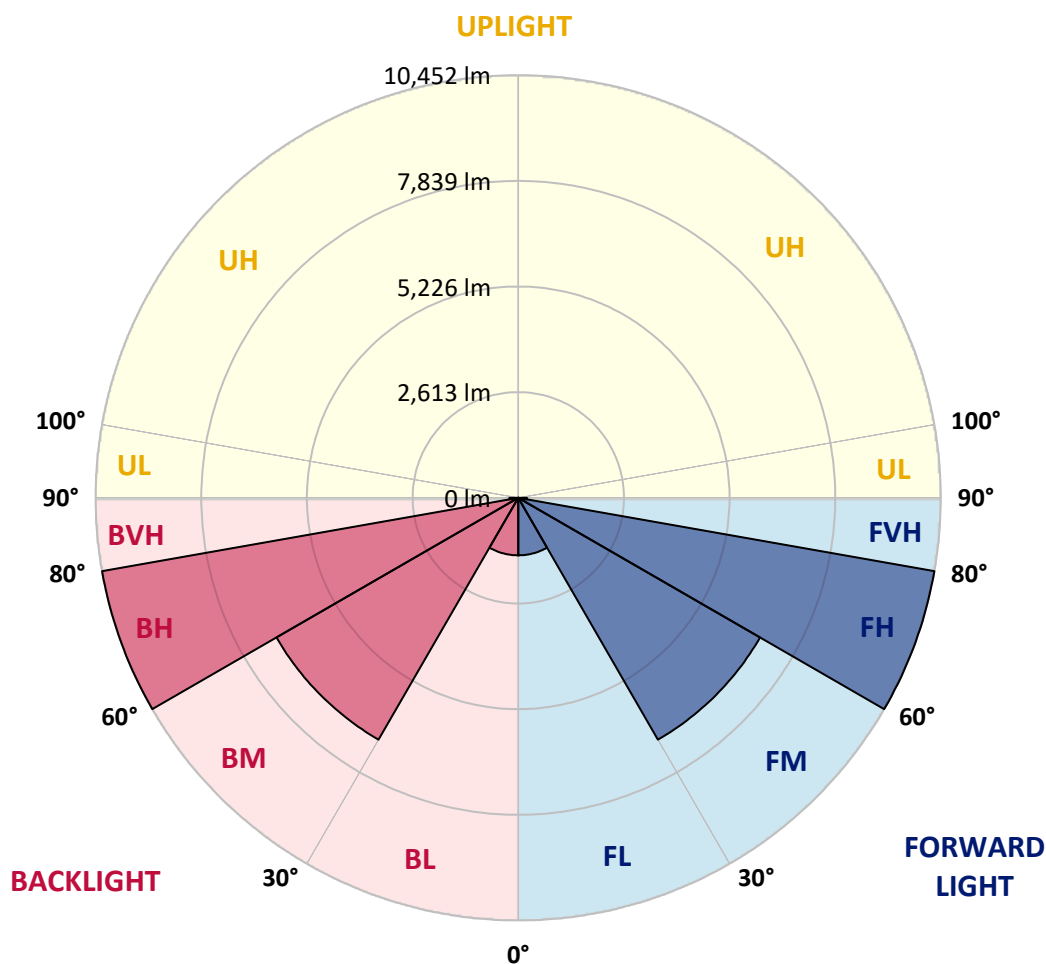
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1422.2	3.7			
FM	(30°-60°)	6906.2	18.2			
FH	(60°-80°)	10451.8	27.5			G4/12000
FVH	(80°-90°)	217.1	0.6			G2/225
BL	(0°-30°)	1422.2	3.7	B3/2500		
BM	(30°-60°)	6906.2	18.2	B4/8500		
BH	(60°-80°)	10451.8	27.5	B5		G4/12000
BVH	(80°-90°)	217.1	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G4

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3465.8	3465.8	3465.8	3465.8	3465.8	3465.8	3465.8	3465.8	3465.8	3465.8	3465.8
2.5°	3444.2	3454.0	3450.0	3442.2	3442.2	3436.2	3442.2	3446.2	3452.1	3456.0	3454.0
5°	3398.7	3406.6	3404.6	3398.7	3400.7	3394.8	3398.7	3404.6	3408.6	3410.6	3410.6
7.5°	3359.2	3367.1	3363.2	3353.3	3353.3	3347.3	3349.4	3355.3	3361.2	3363.2	3363.2
10°	3349.4	3357.3	3345.4	3329.6	3323.7	3315.8	3317.7	3323.7	3335.6	3341.5	3341.5
12.5°	3353.3	3359.2	3347.3	3323.7	3317.7	3309.8	3309.8	3315.8	3331.6	3339.4	3341.5
15°	3365.2	3371.1	3353.3	3327.7	3321.7	3315.8	3313.8	3321.7	3339.4	3353.3	3355.3
17.5°	3386.9	3392.9	3365.2	3329.6	3321.7	3323.7	3321.7	3327.7	3355.3	3381.0	3381.0
20°	3406.6	3410.6	3373.1	3329.6	3321.7	3323.7	3321.7	3333.6	3369.1	3404.6	3406.6
22.5°	3412.5	3416.5	3381.0	3343.4	3337.5	3339.4	3337.5	3349.4	3382.9	3418.5	3418.5
25°	3414.6	3420.4	3392.9	3363.2	3373.1	3377.0	3373.1	3375.0	3400.7	3432.3	3430.4
27.5°	3444.2	3452.1	3426.4	3400.7	3406.6	3404.6	3410.6	3416.5	3436.2	3467.9	3460.0
30°	3505.4	3511.3	3489.6	3463.9	3460.0	3446.2	3463.9	3483.7	3505.4	3533.1	3527.1
32.5°	3606.1	3617.9	3590.3	3562.7	3544.9	3537.0	3550.8	3584.3	3613.9	3643.7	3631.8
35°	3773.9	3781.8	3756.2	3704.9	3673.3	3673.3	3685.1	3728.5	3775.9	3813.4	3799.7
37.5°	4010.9	4020.8	3975.4	3914.2	3866.8	3866.8	3882.6	3928.0	3999.1	4052.4	4032.7
40°	4299.3	4313.1	4255.8	4192.7	4147.3	4139.4	4159.0	4210.4	4277.5	4344.7	4322.9
42.5°	4646.8	4662.6	4587.6	4532.3	4496.8	4496.8	4506.6	4554.1	4615.3	4698.2	4692.2
45°	5091.2	5118.8	5016.1	4960.9	4927.3	4935.2	4941.1	4982.5	5037.9	5132.7	5128.7
47.5°	5620.5	5648.1	5539.5	5482.2	5476.3	5513.8	5490.1	5519.7	5549.3	5658.0	5626.4
50°	6220.8	6268.2	6193.2	6189.3	6201.0	6270.2	6214.9	6230.7	6197.2	6266.2	6224.7
52.5°	6955.4	7024.6	7010.8	7034.5	7166.8	7309.0	7182.6	7127.2	7000.9	7022.6	6949.5
55°	7846.2	7950.8	7970.5	8112.8	8412.9	8703.2	8434.6	8211.5	7942.9	7893.5	7816.5
57.5°	8859.2	8942.2	9037.0	9327.3	9888.2	10403.5	9888.2	9394.4	8971.8	8871.1	8799.9
60°	9949.4	10052.1	10142.9	10571.4	11404.9	12129.6	11389.0	10605.0	10046.1	9909.9	9791.3
62.5°	11120.4	11252.8	11316.0	11791.9	12763.5	13628.5	12777.3	11827.5	11207.3	11061.2	10942.7
65°	12244.1	12352.8	12423.8	12931.4	13859.5	14726.6	13922.8	12986.6	12348.8	12157.2	12062.4
67.5°	12767.5	12826.7	13000.5	13575.2	14554.7	15544.1	14720.6	13636.4	12923.5	12587.7	12591.7
70°	12001.2	11880.8	12299.5	13219.7	14637.7	16045.8	14827.2	13192.1	12319.2	11774.1	11904.5
72.5°	9274.0	9066.6	9793.4	11367.4	13689.7	15725.9	13784.5	11456.2	10245.6	9139.6	9414.2
75°	5045.8	4810.7	5814.0	7804.7	10917.1	13630.4	11167.9	8027.8	6473.6	5008.3	5334.1
77.5°	1423.8	1335.0	2144.7	3775.9	6566.5	9570.2	6819.2	3858.9	2543.6	1508.8	1676.7
80°	436.4	422.6	572.7	1137.5	2788.5	4583.7	2679.9	1151.4	728.8	460.1	485.8
82.5°	258.7	237.0	284.3	414.7	710.9	1439.7	691.2	432.4	347.6	233.0	252.8
85°	148.1	138.3	167.9	201.4	238.9	306.1	199.5	205.4	185.6	124.4	130.4
87.5°	61.2	55.2	65.2	63.2	55.2	71.1	53.3	63.2	75.0	49.4	45.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)